

REMARKS

At the time of the Office Action dated June 6, 2006, claims 1-22 were pending and rejected in this application.

On pages 2 and 3 of the Office Action, the Examiner objected to the drawings, asserting that the features recited in claims 6-7 and 17-18 are not shown. Applicants respectfully disagree. The Examiner is referred to the last line on paragraph [0032] of Applicants' disclosure, which describes that the trace executioner 23 has a method "setLogEvent()", which executes or blocks a tracing process. The trace execution 23 is illustrated in Fig. 2. Thus, these limitations are shown in the drawings.

CLAIMS 1-5 AND 12-16 ARE REJECTED UNDER 35 U.S.C. § 101

The Examiner asserted that the invention according to claims 1-5 and 12-16 "do not produce a useful and tangible result." Applicants respectfully disagree.

At the outset, Applicants note that there is no requirement that the claims themselves describe the useful and tangible result, only that the invention covered by the claims produce the useful and tangible result. If, as the Examiner has asserted, claims 6 and 17 are directed to statutory subject matter under 35 U.S.C. § 101, then claims 1 and 12, upon which claims 6 and 17 respectively depend, must also be directed to statutory subject matter.

By definition, dependent claims 6 and 17 include all of the limitations recited in independent claims 1 and 12, respectively. The only difference between claims 1 and 6 and claims 12 and 17 is that claim 6 has a narrower scope than claim 1 and claim 17 has a narrower scope than claim 12. Thus, if claims 6 and 17 are directed to statutory subject matter, then claims 1 and 12 must also cover statutory subject matter. Therefore, Applicants respectfully solicit withdrawal of the imposed rejection of claims 1-5 and 12-16 under 35 U.S.C. § 101.

**CLAIMS 1-4, 8-9, 12-15, AND 19-20 ARE REJECTED UNDER 35 U.S.C. § 102 AS BEING
ANTICIPATED BY ALEXANDER ET AL., U.S. PATENT NO. 6,055,492 (HEREINAFTER
ALEXANDER)**

On pages 4-6 of the Office Action, the Examiner asserted that Alexander discloses the invention corresponding to that claimed. This rejection is respectfully traversed.

The factual determination of anticipation under 35 U.S.C. § 102 requires the identical disclosure, either explicitly or inherently, of each element of a claimed invention in a single reference.¹ As part of this analysis, the Examiner must (a) identify the elements of the claims, (b) determine the meaning of the elements in light of the specification and prosecution history, and (c) identify corresponding elements disclosed in the allegedly anticipating reference.² This burden has not been met.

¹ In re Rijckaert, 9 F.3d 1531, 28 USPQ2d 1955 (Fed. Cir. 1993); Lindermann Maschinenfabrik GMBH v. American Hoist & Derrick Co., 730 F.2d 1452, 221 USPQ 481 (Fed. Cir. 1984).

² Lindermann Maschinenfabrik GMBH v. American Hoist & Derrick Co., *supra*.

Claims 1 and 12

On page 4 of the Office Action, the Examiner asserted that column 6, lines 25-28 discloses the claimed routine registration means. However, upon reviewing this passage, which refers to step 172 in Fig. 7, Applicants are unable to determine where Alexander discloses that for each thread being executed in a multithreading environment, a routine is registered. Instead, Alexander only states that certain information is obtained, but there is no description of "registration" or that registration occurs for "each thread being executed," as claimed.

Claim 1 further recites a level determination means, for which the Examiner cited column 6, lines 37-39 to disclose. This passage within Alexander, however, is silent as to (i) tracing processing being executed based upon the registration information, and (ii) a determination of a level of the tracing process. Instead, Alexander only queries whether or not a module being entered is a child or the current tree node. The "level" allegedly disclosed by Alexander regards a tree node, not the tracing process.

Claims 2 and 13

The Examiner asserted that column 6, lines 37-43 identically discloses the limitations recited in claim 2. Applicants respectfully disagree. Claim 2 includes the concept that level determination is based upon whether a routine identical to (or in a predetermined relation to) the routine being executed is registered. *Assuming arguendo* that the child node determination taught by step 180 of Alexander corresponds to the claimed level determination, Alexander is silent as to this level determination is based upon whether a routine (other than the routine being executed) is registered.

Claims 3 and 14

Claim 3 recites a table, which the Examiner asserted is disclosed by Fig. 3 of Alexander. However, Fig. 3 is described by Alexander as "an illustration of a trace sequence" (column 3, line 6). Thus, Fig 3 fails to identically disclose the claimed invention recited in claim 3.

Claims 4 and 15

The Examiner cited column 4, lines 18-20 to identically disclose the limitations recited in claim 4. However, the teaching of "dynamically obtaining" information to create the trace in Fig. 3 is not comparable to the claimed means for accepting input for setting or changing the table.

Claim 8 and 19

The Examiner cited column 5, lines 50-52 to identically disclose the limitations recited in claim 8. Applicants respectfully disagree. The cited passage of column 5, lines 50-52 is unrelated to the description of Fig. 7 in column 6, lines 17-47, which is the basis of the Examiner's initial description of the level determination means, which is being further described in claim 8. The Examiner has not reconciled how the calls 134 disclosed in Fig. 5 of Alexander are related to step 180 illustrated in Fig. 7. Moreover, the Examiner has failed to establish exactly what feature identically discloses the claimed "simultaneous execution information."

Claims 9 and 20

The Examiner cited column 5, lines 47-48 to identically disclose the limitations recited in claim 9. Applicants incorporate herein the arguments previously presented with regard to claims 8 and 19, upon which claims 9 and 20 respectively depend. The Examiner has also not reconciled how the table data illustrated in Fig. 5 of Alexander is related to step 180 illustrated in Fig. 7.

Therefore, for the reasons stated above, Applicants respectfully submit that the imposed rejection of claims 1-4, 8-9, 12-15, and 19-20 under 35 U.S.C. § 102 for anticipation based upon Alexander is not factually viable and, hence, solicit withdrawal thereof.

CLAIMS 5 AND 16 ARE REJECTED UNDER 35 U.S.C. § 103 FOR OBVIOUSNESS BASED UPON ALEXANDER IN VIEW OF BROBERG ET AL., "VISUALIZATION AND PERFORMANCE PREDICTION" (HEREINAFTER BROBERG)

On pages 5 and 6 of the Office Action, the Examiner concluded that one having ordinary skill in the art would have been motivated to modify Alexander in view of Broberg to arrive at the claimed invention. This rejection is respectfully traversed.

Claims 5 and 16 depend ultimately from independent claims 1 and 12, and Applicants incorporate herein the arguments previously advanced in traversing the imposed rejection of claims 1 and 12 under 35 U.S.C. § 102 for anticipation based upon Alexander. The secondary reference to Broberg does not cure the argued deficiencies of Alexander. Accordingly, even if one having ordinary skill in the art were motivated to modify Alexander in view of Broberg, the proposed combination of references would not yield the claimed invention.

Moreover, Applicants note that the Examiner has failed to establish a realistic motivation to modify Alexander in view of Broberg. The Examiner's asserted motivation for this combination is "to trace such routines in order to handle various I/O activities as suggested by Broberg." The Examiner has not explained how basing a level determination on whether two routines access a shared resource enables some unstated entity "to handle various I/O activities." Applicants, therefore, respectfully submit that the imposed rejection of claims 5 and 16 under 35 U.S.C. § 103 for obviousness based upon Alexander in view of Broberg is not viable and, hence, solicit withdrawal thereof.

CLAIMS 6-7 AND 17-18 ARE REJECTED UNDER 35 U.S.C. § 103 FOR OBVIOUSNESS BASED UPON ALEXANDER IN VIEW OF LARUS, "EFFICIENT PROGRAM TRACING"

On pages 7 and 8 of the Office Action, the Examiner concluded that one having ordinary skill in the art would have been motivated to modify Alexander in view of Larus to arrive at the claimed invention. This rejection is respectfully traversed.

Claims 6-7 and 17-18 depend ultimately from independent claims 1 and 12, and Applicants incorporate herein the arguments previously advanced in traversing the imposed rejection of claims 1 and 12 under 35 U.S.C. § 102 for anticipation based upon Alexander. The secondary reference to Larus does not cure the argued deficiencies of Alexander. Accordingly, even if one having ordinary skill in the art were motivated to modify Alexander in view of Larus, the proposed combination of references would not yield the claimed invention.

Regarding claim 6, after reviewing page 57, column 1 of Larus, Applicants are unable to determine where "Larus teaches a level determination scheme that provides an indication of unrestricted execution upon encountering 'impossible instructions'," as alleged by the Examiner. Applicants are unable to find any mention of a routine being provided "unrestricted execution" upon the "impossible instructions" being encountered.

As to claim 7, which recites that the level determination means block execution of a tracing process unless a routine identical to the routine (or having a predetermined relation to the routine) is registered, the Examiner's comments do not support the assertion that Larus discloses this limitation. Even assuming that Larus teaches that certain types of instructions do not need to be traced unless they are registered, the claimed invention is directed to determining whether or not a first routine is blocked from being traced based upon whether or not a second routine, which has some relationship with the first routine, is registered. The Examiner's comments are only directed to a single routine, and not to the relationship between two different routines.

Applicants, therefore, respectfully submit that the imposed rejection of claims 6-7 and 17-18 under 35 U.S.C. § 103 for obviousness based upon Alexander in view of Larus is not viable and, hence, solicit withdrawal thereof.

**CLAIMS 10 AND 21 ARE REJECTED UNDER 35 U.S.C. § 103 FOR OBVIOUSNESS BASED
UPON ALEXANDER IN VIEW OF "DEBUGGING WITH GDB" (HEREINAFTER GDB)**

On pages 8 and 9 of the Office Action, the Examiner concluded that one having ordinary skill in the art would have been motivated to modify Alexander in view of GDB to arrive at the claimed invention. This rejection is respectfully traversed.

Claims 10 and 21 depend ultimately from independent claims 1 and 12, and Applicants incorporates herein the arguments previously advanced in traversing the imposed rejection of claims 1 and 12 under 35 U.S.C. § 102 for anticipation based upon Alexander. The secondary reference to GDB does not cure the argued deficiencies of Alexander. Accordingly, even if one having ordinary skill in the art were motivated to modify Alexander in view of GDB, the proposed combination of references would not yield the claimed invention. Applicants, therefore, respectfully submit that the imposed rejection of claims 10 and 21 under 35 U.S.C. § 103 for obviousness based upon Alexander in view of GDB is not viable and, hence, solicit withdrawal thereof.

**CLAIMS 11 AND 22 ARE REJECTED UNDER 35 U.S.C. § 103 FOR OBVIOUSNESS BASED
UPON ALEXANDER IN VIEW OF SAUVAGE, U.S. PATENT NO. 6,163,881**

On page 10 of the Office Action, the Examiner concluded that one having ordinary skill in the art would have been motivated to modify Alexander in view of Sauvage to arrive at the claimed invention. This rejection is respectfully traversed.

Claims 11 and 22 depend ultimately from independent claims 1 and 12, and Applicants incorporates herein the arguments previously advanced in traversing the imposed rejection of claims

1 and 12 under 35 U.S.C. § 102 for anticipation based upon Alexander. The secondary reference to Sauvage does not cure the argued deficiencies of Alexander. Accordingly, even if one having ordinary skill in the art were motivated to modify Alexander in view of Sauvage, the proposed combination of references would not yield the claimed invention. Applicants, therefore, respectfully submit that the imposed rejection of claims 11 and 22 under 35 U.S.C. § 103 for obviousness based upon Alexander in view of Sauvage is not viable and, hence, solicit withdrawal thereof.

Applicants have made every effort to present claims which distinguish over the prior art, and it is believed that all claims are in condition for allowance. However, Applicants invite the Examiner to call the undersigned if it is believed that a telephonic interview would expedite the prosecution of the application to an allowance. Accordingly, and in view of the foregoing remarks, Applicants hereby respectfully request reconsideration and prompt allowance of the pending claims.

Although Applicants believe that all claims are in condition for allowance, the Examiner is directed to the following statement found in M.P.E.P. § 706(II):

When an application discloses patentable subject matter and it is apparent from the claims and the applicant's arguments that the claims are intended to be directed to such patentable subject matter, but the claims in their present form cannot be allowed because of defects in form or omission of a limitation, the examiner should not stop with a bare objection or rejection of the claims. The examiner's action should be constructive in nature and when possible should offer a definite suggestion for correction.

To the extent necessary, a petition for an extension of time under 37 C.F.R. § 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper,

Application No.: 10/715,769

including extension of time fees, to Deposit Account 09-0461, and please credit any excess fees to such deposit account.

Date: September 6, 2006

Respectfully submitted,

/Scott D. Paul/

Scott D. Paul

Registration No. 42,984

Steven M. Greenberg

Registration No. 44,725

CUSTOMER NUMBER 46320